

DRAFT Data Assessment Team (DAT) Conference Call Notes
05/12/2016 at 11:00 a.m.

Participants: Jeff Stuart (NMFS), Rhiannon Mulligan and Loi Tran (DWR), Josh Gruber and Jon Speegle (USFWS) RG Fernando and Owen Liu (MWD), Geir Aasen (DFW), Lucinda Shih (CCWD)

Sacramento River Fish Monitoring update provided by Rhiannon Mulligan (DWR):

Preliminary Rotary Screw Trap (RST) Report				
Species*	FWS Red Bluff Diversion Dam RST (Estimated Passage)	Glenn-Colusa Irrigation District (GCID) RST (Catch)	DFW Tisdale Weir RST (Catch)**	DFW Knights Landing RST (Catch)
Date	04/22/2016- 05/05/2016	05/11/2016		05/05/2016- 05/08/2016
CHNF	210,894	75		18
CHNLF	630			
CHNW	123			
CHNS	18,960	2		
Ad-Clipped CHN	Not Reported	9		5
SH	632			
Ad-Clipped SH	0			
GST	284		Not Reported	Not Reported
*Chinook race based on length (Frank Fisher model); CHNF=Fall run, CHNLF=Late-fall run, CHNW=Winter run, CHNS= Spring run, SH = Steelhead, GST= Green Sturgeon. Species are unmarked unless noted as adipose-fin clipped (ad-clipped). Data subject to revision.				

RBDD- The next biweekly report will be out next week (5/20/16). Our catch continues to consist of mostly Fall run Chinook. Twenty to thirty adclip Fall run Chinook have been present every day. Daily larval sturgeon catch remains high. Cumulative total for this year is 688 as of 5/11/16.

Jeff Stuart (NMFS) asked if the larval sturgeon will be identified as white or green sturgeon. Josh Gruber (USFWS) replied that the sturgeon cannot be positively identified visually until the scutes are fully developed which happens at ~50mm. The sturgeon are likely green sturgeon because all of the samples sent for genetic testing by the RST program (>500 samples) have come back positive as green sturgeon.

GCID- resumed sampling on 5/10

**Tisdale- traps pulled 5/2 and have not been resumed.

Graphical summaries of the monitoring data collected at the Sacramento River and at other locations can be found at <http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm>. In addition, the biweekly passage reports of juvenile salmonids sampled at the Red Bluff Diversion Dam are available at http://www.fws.gov/redbluff/rbdd_biweekly.aspx.

Hatchery update: Provided by Rhiannon Mulligan (DWR)

On May 9th and 10th, 2016, the Department of Fish and Wildlife will release approximately 300,000 brood year 2015 Chinook from Mokelumne River Hatchery into the Mokelumne River and San Francisco Bay. These releases are the second year of a three year barging study on the Mokelumne River. This release will include 100% marked (adipose fin clip and CWT) fish.

On May 11th, 2016, the Department of Fish and Wildlife will release approximately 160,000 brood year 2015 Chinook from Mokelumne River Hatchery into the Coastside Fishing Club net pens at Pillar Point Harbor. This release will be the first of three releases totaling 480,000 fish. This release will include 100% marked (adipose fin clip and CWT) fish.

On May 12-13, 2016, the Department of Fish and Wildlife will release approximately 900,000 brood year 2015 Mokelumne River Hatchery Fall Run Chinook into the Sherman Island Net Pens on the San Joaquin River. This release will include 25% marked (adipose fin clip) CWT fish.

On May 14, 2016, the Department of Fish and Wildlife will release approximately 1,389,492 brood year 2015 Fall Run Chinook from Nimbus Hatchery into the Lower American River. This release will include 25% marked (adipose fin clip) CWT fish.

Delta Fish Monitoring update provided by Jon Speegle via the DAT reflector (FWS):

Preliminary FWS Trawl and Seine Catch Report from 05/01/16 to 05/07/16				
Species*	Beach Seines	Mossdale Trawl*	Sacramento Trawl	Chipps Island Trawl
CHNF	13		4	78
CHNLF				
CHNW				
CHNS			1	7
Ad-Clipped CHN	2		1	25
SH				
Ad-Clipped SH				
DSM				
LFS				
SPLT	580			6
*Chinook race based on length (Frank Fisher model); CHNF=Fall run, CHNLF=Late-fall run, CHNW=Winter run, CHNS= Spring run, SH = Steelhead, DSM=Delta Smelt, LFS=Longfin Smelt, SPLT = Splittail. Species are unmarked unless noted as adipose-fin clipped (ad-clipped). Data subject to revision.				

*CDFW update (5/1-5/8)- 1 ad-Clipped CHN, 18 non-ad clipped CHN average FL are spring and fall run fish.

Information about the Delta fish monitoring data from FWS can be found at <http://www.fws.gov/stockton/jfmp/>.

Salvage Monitoring update provided by Geir Aasen (DFW):

Preliminary DFW Salvage Report for Salmonids from 05/02/16 to 05/08/16								
Species	Central Valley Project (CVP)				State Water Project (SWP)			
	Adipose-Fin Clipped (Ad-Clipped)		Non-Adipose Fin Clipped (Non-Clipped)		Adipose-Fin Clipped (Ad-Clipped)		Non-Adipose Fin Clipped (Non-Clipped)	
	Salvage	Loss	Salvage	Loss	Salvage	Loss	Salvage	Loss
CHNF								
Total to Date	4	3	72	50	1	4	27	116
CHNLF								
Total to Date	32	26	8	7	61	272	36	159
CHNW								
Total to Date	90	70	28	21	123	558	8	35
CHNS							8	34
Total to Date	616	413	80	57	34	147	42	181
CHNU								
Total to Date								
SH					2		5	
Total to Date	585.7		61		727		57	
<p>-Chinook race based on length (Delta model); CHNF=Fall run, CHNLF=Late-fall run, CHNW=Winter run, CHNS=Spring run, CHNU= Unknown race (Chinook greater than the length-at-date criteria or fork length not measured), SH =Steelhead.</p> <p>-Salvage and loss estimates are rounded to the nearest whole fish.</p> <p>-Documentation on how to calculate salvage and Chinook loss can be found at ftp://ftp.delta.dfg.ca.gov/salvage/Salmon%20Loss%20Estimation/.</p> <p>-Steelhead loss: SWP steelhead loss = salvage x 4.33 and CVP steelhead loss = salvage x 0.68.</p> <p>-Total to date is the total since 10/1/15 (the start of water year 2015).</p> <p>-Data subject to revision.</p>								

Notes: There was no salvage this week of Chinook or Steelhead between from 5/8-5/11. Over all catch is slowing down, but may pick up as hatcheries release Chinook.

Preliminary DFW Salvage Report for Smelt and Other Species from 05/02/16 to 05/08/16				
Species	CVP		SWP	
	Salvage	Total to Date	Salvage	Total to Date
DSM		12		8
LFS		8		2
SPLT		97	2	274
GST				4
WST				
-DSM=Delta Smelt, LFS=Longfin Smelt, SPLT=Splittail, GST=Green Sturgeon, WST=White Sturgeon. -Salvage estimates are rounded to the nearest whole fish. -Total to date is the total since 10/1/15 (the start of water year 2015). -Data subject to revision.				

Smelt Monitoring Update provided by Trishelle Morris via the DAT reflector (DFW):

Spring Kodiak Trawl #5 was in the field the week of May 2. No adult Delta Smelt adults were collected. Juvenile Delta Smelt were collected at three stations, although these fish are undergoing lab verification. This is the final SKT survey of the year.

20-mm Survey #4 was in the field the week of April 25 through 28. Sample processing is 79% complete. So far, a total of 12 juvenile Delta Smelt were collected, 10 from station 719. Sizes range in size from 16 to 32 mm. No Delta Smelt were collected in the central or south Delta. 20-mm Survey #5 is in the field this week.

The Early Warning Survey began November 30 and ended on March 30.

<https://www.wildlife.ca.gov/Conservation/Delta/>

Smelt Working Group update provided by Leigh Bartoo via the DAT reflector (FWS):

Meeting Summary

The Working Group described the risk of entrainment under the Service-provided advice framework. Under this framework the relative risk of entrainment for OMR flow ranges is discussed and assessed. For the current week, the risk of entrainment of larval and juvenile Delta Smelt for each of the flow ranges is characterized as follows:

- -1250 to -2000 cfs has a low risk of entrainment,
- -2000 to -3500 cfs has a medium risk of entrainment,
- -3500 to -5000 cfs has a high risk of entrainment.

Should salvage occur prior to May 16 or if this week's 20 mm Survey detects Delta Smelt in the south or central Delta, the Working Group will need to reconvene to reassess the risk of entrainment.

The Working Group is following guidance for entrainment protections from both Action 2 (adult Delta Smelt) and Action 3 (juvenile Delta Smelt). The Working Group will continue to monitor Delta Smelt survey and salvage data and Delta conditions, and will meet again on Monday, May 16, 2016 at 10 am.

http://www.fws.gov/sfbaydelta/cvp-swp/smelt_working_group.cfm.

Delta Operations for Salmonids and Sturgeon (DOSS) Working Group Update provided by Jeff Stuart via the DAT reflector (NMFS)

New since Tuesday

- No salvage at either the SWP or CVP for listed salmonids or green sturgeon (5/9 -5/11).
- GCID lowered RST cones at 1 pm 5/10/16. Capture at 9am next morning: 75 FRCS, 2 SRCS, and 9 clipped CS.
- No reports since 5/9 from Knights Landing RST

DOSS update for WOMT (5/10/16):

- DOSS met Tuesday morning (5/10/16), and provided no advice.
- DOSS notes are posted at:http://www.westcoast.fisheries.noaa.gov/central_valley/water_operations/ocapwy2016.html
- RPA Implementation
 - IV.1.2 (DCC ops): DCC gates have been closed since 12/15/15
 - IV.2.3 (OMR management):
 - No triggers exceeded over past week
 - OMR limit of -5,000 cfs is in effect for NMFS' species
 - IV.2.1 San Joaquin River I:E ratio:
 - Started 4/1/16. Currently 2:1 ratio Vernalis flows to exports with a minimum of 1,500 cfs exports for human health and safety (Dry year classification as of April WY update).
 - NMFS concurred with Reclamation's request for flexibility in the I:E ratio on 4/14/16 - allows picking up "augmented water" from Oakdale

Irrigation District and South San Joaquin Irrigation District releases of up to 75 thousand acre feet (TAF) from New Melones at a 1:1 ratio by the Projects and moving the water south of Delta. Remaining "unaugmented water" will be picked up at the 2:1 ratio with a minimum export rate of 1,500 cfs for human health and safety.

- Factor(s) controlling exports: As of 5/10/16, the exports are limited by both NMFS' RPA IV.2.1., and the flow and water quality requirements of D-1641.

- Fish Monitoring Highlights

Seeing declining catch of fall-run and spring-run sized fish (unclipped and clipped) in most monitoring efforts in the Sacramento River, Delta, San Joaquin River, and Chipps, including:

- 13 FRCS, and 2 unclipped CS in the beach seines,
- 4 FRCS, 1 SRCS, and 1 clipped CS in the Sacramento trawl,
- 18 unclipped CS, and 1 clipped CS in the Mossdale trawls,
- 78 FRCS, 7 SRCS, 25 clipped CS in the Chipps Island Trawls,
- 21 FRCS, 1 SRCS and 5 clipped CS in the Knights Landing monitoring (5/1 to 5/7).
- Tisdale RST is in a non-operational status as of 5/3/16.

- Salvage:

- Salvage of 8 unclipped SRCS, 0 FRCS at SWP and zero natural Chinook salmon at the CVP, no hatchery Chinook salvaged at either facility. Overall trend of fish salvage is declining over the past week.
- 5 wild Steelhead were captured at SWP facility, zero at the CVP; trend has increased over past week.
- Salvage of 2 hatchery steelhead at the SWP and zero hatchery steelhead at the CVP, trend is declining over the past week.

- Fish Distribution Estimates (all distributions updated since last week)
 - Estimate of young-of-year **winter-run Chinook** distribution: <1% upstream, ≤ 5% in the Delta, ≥ 95% exited the Delta (same as last week)
 - Estimate of young-of-year **spring-run Chinook** distribution: <5% upstream, 5% in the Delta, > 90 % exited the Delta
 - Estimate of young-of-year **hatchery winter-run Chinook** distribution: <1% upstream, <5% in the Delta, >95% exited the Delta (same as last week)

- Entrainment risks (primarily to Winter-run and Spring-run Chinook)
 - Overall Entrainment into **Interior Delta**:
 - **LOW** for Sacramento Basin fish (same as last week)
 - **LOW to MEDIUM** for San Joaquin Basin fish (same as last week)
 - Overall Entrainment into **CVP/SWP Export Facilities**:
 - OMR -2,500 cfs to -3,500 cfs:
 - **LOW** for Sacramento Basin fish (same as last week)
 - **LOW** for San Joaquin River fish (same as last week)
 - OMR -3,500 cfs to -5,000 cfs:
 - **LOW** for Sacramento River basin fish (same as last week)
 - **LOW** for San Joaquin River basin steelhead (same as last week)
 - (Discussion between DOSS members as to whether the entrainment risks for fish were low for both OMR bins or were different for the two bins, as was the case last week. Some members believed that the entrainment risks were low for both the low and high bins, as these levels of OMR did not influence entrainment compared to the tidal influence in the general central Delta region. Others believed that the two bins had different effects on entrainment when fish were in the area of influence of the export pumps. Others also pointed out that more wild steelhead were observed in salvage this week than last

week, and may indicate an elevated risk above the “low” classification.)

Full DOSS notes posted at:

http://www.westcoast.fisheries.noaa.gov/central_valley/water_operations/ocapwy2016.html

Operations update provided by Loi Tran (DWR)

Preliminary Summary for 05/12/2016			
SWP		CVP	
Clifton Court Inflow (cfs)	1,600	Jones Pumping Plant (cfs)	1,000
SWP San Luis Reservoir Share (TAF) as of Midnight	497	CVP San Luis Reservoir Share (TAF) as of Midnight	399
San Luis Reservoir Total (TAF) as of Midnight	896	American – Nimbus Reservoir Releases (cfs)	4,500
Feather – Oroville Reservoir Releases (cfs)	2,500	Sacramento – Keswick Reservoir Releases (cfs)	6,500
		Stanislaus-Goodwin Reservoir Releases (cfs)	2,000*
DELTA OPERATIONS			
Outflow (cfs)	~14,000	Delta Cross Channel (DCC) Gates	closed
Total Delta Inflow (cfs)	~18,945	1 day OMR average (cfs)	-2676
X2 (km)	=76	5 day OMR average (cfs)	-2735
Export/Inflow (%)	14.7% (14-day average)	14 day OMR average (cfs)	-2792

Delta conditions: balanced

Controlling: delta outflow, SJR I/E, Vernalis 1:1

*down to 1,800 cfs by today and down to 1,000 cfs by the 5/18.

A summary of daily operations can also be viewed at

<http://www.water.ca.gov/swp/operationscontrol/docs/delta/deltaops.pdf>.

Next Conference Call:

The next DAT call scheduled for May 19th, 2016 at 11am.

Cal fed ops scheduled for May 25th.

DAT call will continue to June 2nd and after we may discontinue meeting and provide updates via the DAT reflector.

Final DAT notes can be viewed at

<http://www.water.ca.gov/swp/operationscontrol/calfed/calfeddat.cfm>